Washington Latin -- Honors Pre-Calculus

Quadratics Topics

1. Definition.

2. Solving quadratic equations.

A. Square Roots

B. Factoring out *x.*

C. Simple Factoring. *a* *= 1.*

D. By Grouping. *a ≠ 1.*

E. Factoring Special quadratics -- our friends.

3. Completing the Square.

Complex Numbers

4. Deriving the Quadratic formula.

5. The most important number in quadratics -- .

A. Vertex form .

B. *x -* coordinate of the vertex.

C. Axis of symmetry is .

D. In quadratic formula.

6. The Discriminant. .

A. From the quadratic formula

B. How many roots and what kinds.

7. Graphs of quadratics.

A. Finding the vertex.

B. Over 1 up 1, over 3 up 3 …

C. Effect of the value and sign of *a*.

D. Zeroes and *y - intercept.*

8. Using Quadratics to model Projectile Motion.

Other word problems.